

### ABSTRACT

A wheel end assembly includes a bearing shaft having an inboard end and an outboard end. A wheel hub is mounted onto the outboard end of the bearing shaft, and a detachable outboard joint is mounted onto the inboard end of the bearing shaft. A wheel bearing is mounted onto the bearing shaft between the inboard end and the outboard end. The inboard end of the bearing shaft includes a flange portion that provides a support to keep the wheel bearing positioned onto the bearing shaft and induces a pre-load into the wheel bearing such that the pre-load is maintained on the wheel bearing when the outboard joint is removed from the wheel end assembly.